REMARKS

1. Objection to the drawings:

Please find attached a replacement sheet for Fig. 2 correcting the locations of the reference numbers 215 and 225.

Acceptance of this proposed correction to the drawings is respectfully requested.

2. Objection to specification:

Paragraph [0023] is amended to define PI, BCB, and PFCB as the commonly known semiconductor materials polyimide (PI), benzocyclobutene (BCB), and perfluorocyclobutane (PFCB). No new matter is entered.

Withdrawal of this objection is respectfully requested.

3. Objections to the claims:

Claim 19 is amended to define PI, BCB, and PFCB as the commonly known semiconductor materials polyimide (PI), benzocyclobutane (BCB), and perfluorocyclobutene (PFCB). No new matter is entered.

Claim 20 is amended to be dependent on claim 3 to correct antecedent basis for the "conductive transparent adhesive layer" of claims 20 and 21.

Withdrawal of these objections is respectfully requested.

4. Rejection of claims 1, 2, 18, and 24 under 35 U.S.C. 102(b) as being anticipated by Fukasawa et al. (US 6,396,082) hereinafter "Fukasawa":

Regarding claim 1:

Fukasawa does not teach or suggest the claim 1 limitation of

a compound substrate comprising a high thermal conductive layer.

The Examiner has likened Fukasawa's transparent resin section 27 to the claimed high thermal conductive layer. However, nowhere does Fukasawa teach the transparent resin section 27 to be of high thermal conductivity. In fact, resins, which are materials such as polymers and the like, are commonly known in the semiconductor art to be of low thermal conductivity. Such attributes of resins are well-known to those of ordinary skill in the art. Such a person reading claim 1 would not readily correlate the term "high thermal conductive layer" to a resin.

For example, the thermal conductivity of epoxy resin is about 1 W/mK, which is about equal to or less than the thermal conductivities of common substrate materials. On the other hand, the thermal conductivity of the high thermal conductive layer ranges from 170-400 W/mK (materials Cu, Al, Au, Ag, W of claim 16). Thus, Fukasawa's transparent resin section 27 has a very low thermal conductivity and does not meet the limitation of being a "high thermal conductive layer."

One effect of this limitation is that products according to the invention can dissipate heat more effectively. In contrast, Fukasawa's transparent resin section 27 is used to allow light to be guided out the bottom surface of a substrate (see Abstract, for example). Fukasawa's transparent resin section 27 is not taught to offer and heat transfer capability

at all.

In addition, it is argued that the above limitation is also unobvious given Fukasawa. Fukasawa requires a transparent resin to allow light to pass through the substrate; this is one of the main features of Fukasawa's art. It is doubtful that a transparent resin would also have a high thermal conductive property.

Withdrawal of this rejection is respectfully requested in view of the above argument. Claims 2, 18, and 24 are dependent and should be allowed if claim 1 is found to be allowable.

5. Allowed claims:

Allowance of claims 3-17, 22, 23, 25, and 26 is acknowledged and appreciated.

6. Relevant References:

US Pat. Pub. 2004/0104393 and US Patent 6,876,005 were owned by the assignee of the present application at the time of invention of the subject matter of the present application.

Sincerely yours,

Winston Hsu Date: Nov. 03, 2005

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Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)

Attachment(s): Fig. 2 Replacement Sheet (1 page)